

JK 716

.B6

Copy 1

ECONOMIC TRACTS. No. XXII.

CIVIL-SERVICE EXAMINATIONS

BEING QUESTION PAPERS, WITH ACTUAL ANSWERS OF
SUCCESSFUL AND UNSUCCESSFUL CANDIDATES

EDITED, WITH AN INTRODUCTION

BY

R. R. BOWKER

NEW YORK

THE SOCIETY FOR POLITICAL EDUCATION

31 PARK ROW

1886

The Society for Political Education.

(ORGANIZED 1880.)

OBJECTS.—The SOCIETY was organized by citizens who believe that the success of our government depends on the active political influence of educated intelligence, and that parties are means, not ends. It is entirely non-partisan in its organization and is not to be used for any other purpose than the awakening of an intelligent interest in government methods and purposes, tending to restrain the abuse of parties and to promote party morality.

Among its organizers are numbered Democrats, Republicans, and Independents who differ among themselves as to which party is best fitted to conduct the government; but who are in the main agreed as to the following propositions:

The right of each citizen to his free voice and vote must be upheld.

Office-holders must not control the suffrage.

The office should seek the man, and not the man the office.

Public service, in business positions, should depend solely on fitness and good behavior.

The crimes of bribery and corruption must be relentlessly punished.

Local issues should be independent of national parties.

Coins made unlimited, legal tender must possess their face value as metal in the markets of the world.

Sound currency must have a metal basis, and

all paper-money must be convertible on demand.

Labor has a right to the highest wages it can earn, unhindered by public or private tyranny.

Trade has a right to the freest scope, unfettered by taxes, except for government expenses.

Corporations must be restricted from abuse of privilege.

Neither the public money nor the people's land must be used to subsidize private enterprise.

A public opinion, wholesome and active, unhampered by machine control, is the true safeguard of popular institutions.

Persons who become members of the Society are not, however, required to endorse the above.

METHODS.—The Society proposes to carry out its objects by submitting from time to time to its members lists of books which it regards as desirable reading on current political and economic questions; by selecting annual courses of reading for its members; by supplying the books so selected at the smallest possible advance beyond actual cost; by furnishing and circulating at a low price, and in cheap form, sound economic and political literature in maintenance and illustration of the principles above announced as constituting the basis of its organization; and by assisting in the formation of reading and corresponding circles and clubs for discussing social, political, and economic questions.

ORGANIZATION.—The Society is managed by a Committee, selected from year to year. The correspondence of the Society is divided among five Secretaries, one each for the East, the Northwest, the Southeast, the Southwest, and the Pacific Slope.

It is suggested that branch organizations be formed wherever it is possible (and especially in colleges) to carry out the intentions of the Society. Any person who will form a Club of ten persons, each of whom shall be an active member of this Society, will be entitled to a set of the tracts issued for the current year.

ECONOMIC TRACTS. No. XXII.

CIVIL-SERVICE EXAMINATIONS

BEING QUESTION PAPERS, WITH ACTUAL ANSWERS
OF SUCCESSFUL AND UNSUCCESSFUL CANDIDATES

EDITED, WITH AN INTRODUCTION, BY

R. R. BOWKER

NEW YORK
THE SOCIETY FOR POLITICAL EDUCATION
31 PARK ROW
1886

011716
.B6

Civil-Service Examinations.

THE United States Government is the largest single employer of labor in this country. Its pay-rolls include 120,000 people. When it pays wages, whether it is the salary of the President of the United States or the day's wages of a laborer at the commonest work, every penny has to come out of the pockets of the people. Even if they do not pay taxes, they have to pay government expenses all the same, since they pay higher prices for rent and for all they buy because of the taxes. When Uncle Sam, therefore, pays for a day's work he ought to get the best day's work that can be had for the money. Unfortunately he has often had the worst instead of the best service, because in hiring men a great many considerations have come in with which a private employer would not have to deal. Men who have been workers in "politics" thought it proper that they should be paid for that kind of work by "getting an office," and they consequently felt it less their duty to do the real work for which the salary was really paid. It has also been the frequent custom to employ great numbers of men in the navy yards a few days before election (virtually to buy their votes), and then to turn them out into the cold a few days after the election. It was difficult to stop this because the politicians thought it to their interest to keep up the system. What is true of the national government is also true in less degree of each State in the

Union, and each city or town. They ought to get the best service at a fair rate, but they have often paid the highest prices for the poorest kind of work.

“Civil-service reform” had two things to accomplish : first, to prevent the government service, the service of the whole people, from being misused for politicians or parties ; second, to provide for choosing fit men for the public service, on truly democratic principles.

Usually, after each election, the politicians who had won wanted places for their friends. They began this cry as long ago as the time of Thomas Jefferson. But Jefferson refused to remove good officers, unless they had been violent partisans. The party workers, nevertheless, kept up their pressure, and by the time of Jackson it was recognized that “to the victors belong the spoils.” This meant that the half of the American people which won in an election were entitled to look upon the other half as victims of war. This was a very un-American, un-democratic, un-republican spirit.

The pressure on appointing officers to put new men in could not be satisfied without turning tried men out. The appointing officers found a great part of their time used up by office-seekers, when they should have been doing the public business. They did not like to put out trained men, and put in new ones who would have to waste much time in training. Moreover, the men who were put in, knowing they might be turned out at the next election, in their turn, took less pains to learn their work well. And they felt obliged to give a good deal of their work to the politicians who got them in, instead of to the whole people which paid them their salary. They became literally the “retainers” of politicians, who used them to pack conventions and influence nominations, till outside citizens began to find that they had almost

no influence in politics at all. Democracy was, in short, becoming a sham ; an oligarchy of office-holders was running the country. The public service was saved from utter corruption only by the native strength and honesty of American character.

The remedy first suggested for this evil was, naturally enough, to prevent removals, so that there would be no chance for the politicians to put their men in. But it was not possible to prevent the removals of good men without tying up public officers so that they could not remove inefficient men. No business can be conducted without constantly weeding out the poor stuff. This was not a safe cure. The true remedy was found in preventing unfit appointments by examining applicants as to their fitness. The "worker" who was a mere tool of a politician thus had no chance. It was also found that by referring applicants to a Board, which should report to the appointing officer the best four men from whom to choose, he was relieved of much of the pressure which took his time from public work. The Civil-Service Commission was appointed to work out this plan, and it proved that the best method of preventing the misuse of the service was also the best method of choosing the most fit men—namely, competitive examinations.

The common-sense employer, when he has to hire a new man, tries to find out what sort of a man an applicant is, and how fit he is to do the work he applies for. If two men desire work, and there is work for but one, it is only fair that the work should be given to the man who has trained himself to be best fitted for it. If it were not for this there would be no inducement to men to be industrious and to learn a trade, but a premium would be put on ignorance and idleness, and our whole American system, which is founded on education and on giving

every man a fair chance, would break down. The difficulty in doing this in the case of the government service, has been that, the "government" being the employer, no one person was interested like a private employer in testing those who applied for work. Many of those people who had to do with employing labor felt under obligations to the persons who helped to elect them to office, and they consequently cared more to please their backers than to see that the people got its money's worth when it employed them. To overcome this difficulty the civil-service laws were passed. They provided simply that those seeking government employment should give, as nearly as differing circumstances would permit, the same evidence of being able to do good work that men would give who sought to enter the service of a private employer.

A private employer is pretty sure, first, to ask a man to give some account of himself, where he has been and what he has done ; then to require "references" from those who have known him ; then to judge whether the man is physically capable for the work he wants to do ; then to judge of his general intelligence or education ; and, lastly, to ascertain whether he has special fitness for the particular kind of work he is particularly to do. This is the general plan of the civil-service examinations. One set of questions brings out what the man has to say of himself, his age, experience, etc. Blank forms for "references" or "testimonials" are given him, in which those who have really known him may answer questions so drawn that they must tell plainly and straightforwardly, without dodging, how long they have known him and what they know about him. Another form gives a surgeon's report on his *physique*, in cases where physical ability is important, as for police, firemen or watchmen.

A second set of questions tests the general intelligence of the applicant, his knowledge of writing, reading, arithmetic, and other acquirements which every capable American should have to some extent. A third set of questions ascertains how fit he is for the particular kind of work he has to do, testing either his experience and special knowledge in it or his special capability for learning it. These papers are marked separately, and the mark given to each paper depends upon the importance of the information it gives for the place sought. Thus, for a watchman, *physique* and testimonials would count most, while for an ordinary clerkship, *physique* would scarcely count at all, and general intelligence would be the main thing.

There has been a great deal of nonsense talked and written about asking a man who had to clean streets questions about ancient history, astronomy, and Sanskrit. A few examples of actual examination papers show how false that talk is. Throughout the civil service, according to the new system, the questions have been concerned either with the elementary education which every American citizen ought to have, with the specific technical knowledge that a man requires for the position sought, or with the grammar-school or higher education on which appointment to very responsible positions ought to be based. The answers of successful and of unsuccessful competitors from actual examination papers appended to these examination questions, will illustrate further the practical workings of the system.

Of course, a private employer judges a great deal by a man's bearing, by how he talks, and above all by how he sets to work if a chance is given him ; and it is sometimes said that this cannot be got at by any system of written examinations. This is more or less true, but in

these examinations, the marking from the man's own account of himself, and of what his previous employers or those who certify to him have to say, partly takes the place of talk face to face, and the system of "probation" gives a chance for trying a man at actual work. The successful candidate is not fully appointed for three or six months; during that time he is kept at the work he was chosen to do, and if he fails to do it well he is dropped. If he succeeds, he gets his permanent appointment.

It is also said that, after all, private influence has a good deal to do with employment in private business, that is to say, a merchant will take his brother, or his nephew, or his wife's cousin sooner than he will take an entire stranger. This is true only to a certain extent. The man who succeeds in business takes the best help he can get, and takes his relatives only where they are as good as other applicants. If he is weak-minded enough to let his family instead of himself run the business, he has to suffer the consequences. Uncle Sam is placed by the national civil-service law in a position similar to that of the private employer. He gives his preference to those members of his own family, so to speak, who fought in the war for the Union. If the candidates show equal fitness, and one of them has been a soldier or a sailor in the war, the law requires that he shall be given the place. "Persons honorably discharged from the military or naval service, by reason of disability resulting from wounds or sickness incurred in the line of duty, shall be preferred for appointments to civil offices." On the other hand, a soldier who is not competent does not get the place over a competent private citizen. Thus Uncle Sam is protected from giving places to those who cannot do their money's worth of work. This is a test which

cannot be objected to by any fair-minded applicant, whether he is a soldier or not a soldier. To give places to men only because they were soldiers would be to build up a military caste.

The "merit test," as it has been well called, has proved most satisfactory in practice. It has relieved appointing officers from "pressure," and given them time to attend to their proper work. It has given to the public service more efficient clerks. It has protected them from being at the mercy of politicians. The heads of departments in our cities have borne testimony to its capital workings in their fields. And in Boston, a prominent politician who "did n't take much stock in civil-service reform," said that the Boston system of registering and selecting laborers "has worked well, and has relieved the honest and industrious laborers of many impositions under which they have heretofore suffered." This has caused the gradual extension of civil-service reform, till now it includes over 15,000 places in the national government; State systems, covering also the cities, in New York (including some 14,000 places) and in Massachusetts; and city systems East and West. It should be the aim of every good citizen to help extend this reform.

The objections still raised against the merit system are, for the most part, such as exist against any system of appointment. No system is perfect. It is true, for instance, that bad men may get into office, perhaps from State prison, or men may go out of office into State prison, under the competitive-examination system as under other systems. But the chances are less. The objections of the mere politician, whom it deprives of his power, are a testimony in its favor. It is not true that civil-service reform destroys parties, as he falsely alleges; it makes them mean more, because it puts them again

under control of the people. One serious source of dissatisfaction with the reform that should be mentioned, is the disappointment of those who have passed their examination and are not appointed. It arises from the natural mistake of supposing that this gives them an absolute right to government employment. The facts are simply, that the government has certain work to do, and for that it requires a certain number of men. If more apply, they cannot all get places, and some must be disappointed. If twelve apply for one place, of whom six are pronounced fit, and four certified to the appointing officer as highest, the eleven, the five, the three, will be disappointed in the degree in which they have come near to success. But no system could prevent this.

The "spoils system," indeed, and some of these criticisms upon the "merit system," are based upon a doctrine that would utterly destroy the American nation. The idea that every citizen has "a claim" upon government for place, or that those faithfully doing for the public what they are paid to do, should be "rotated" out of office to give the next man a chance, develops presently into a weak socialism that would take all the independence out of Americans and make the nation a great paternal workhouse. The only safe doctrine is that of President Cleveland, that "public office is a public trust." The competitive-examination system is, as a matter of fact, the only truly democratic system. It gives every man a fair chance, no matter how poor he is or how little political influence he has. In the practical, every-day life of the world, a man's success depends upon his own vigor and intelligence. The civil-service examination is simply a test of that same vigor and intelligence. In short, the civil service under the present reform has changed from the favoritism and corruption which the "spoils sys-

tem " involved, to a truly American basis, on which each man, whether he has or has not money or friends, is made to stand on his own feet and given an equal chance to earn his own living.

The papers given herewith show the actual workings of the system in its varied applications in the national, State, and municipal services, to different grades of work. The lowest grade is first given, as shown by the use in Boston of a "civil-service-reform" method for selecting laborers, not competitive in form, but practically so when the choice comes actually to be made. The next papers are the examinations for policemen, for which class physique, common-sense, and some local knowledge are the chief requirements. The Brooklyn papers are used, since in this city there has been perhaps the most complete development of this method for municipal servants of this class. The New York City method adds, for police and firemen, a practical athletic test in running, climbing, etc. The next grade illustrated is that of letter-carrier, of course in the national service, and handwriting, arithmetic, and geographical knowledge are the vital subjects, and physique drops out. Finally, an example is given of the examination for the scientific position of house inspector (called sanitary engineer) in New York City. Here the technical paper is that of chief importance. In each case of the competitive examinations, the answers of a successful candidate are given at the left-, and of an unsuccessful candidate at the right-hand side of the page. It will be seen (contrary to the favorite satire on the system) that if the applicant shows common-sense, a good deal of bad spelling is forgiven him. The system varies somewhat, it will be seen, in the national, State, and local boards; and it is also to be noted that the methods of examination are

constantly being improved in the direction of "practice," not of "theory," as the result of experience and of the consultation of the various boards with each other. Thus, the New York City board has, since the examination quoted, adopted a much better form of application from those desiring to enter the service. In this way is fulfilled the true spirit of civil-service reform—the American principle of being at once practical and progressive.

THE BOSTON REGISTRY OF LABORERS.

In Boston, the Massachusetts Civil-Service Commission has introduced a "merit system" for the benefit of laborers, on a non-competitive basis, which is as follows :

An applicant for work as a common laborer has, first, to produce certificates from two respectable citizens, as shown in the accompanying paper marked "A."

Then the clerk asks him the necessary questions to fill out the form No. 1, as shown in the accompanying paper marked "B"; and the statement is sworn to.

Subsequently a card is filled out, as shown by "C." An "M" in red ink indicates military service. A figure in blue ink indicates the number in the applicant's family depending upon him for support. The cards, when filled out in this way, are handed in to police head-quarters and sent out to the divisions indicated. The patrolman on the beat where the applicant lives, or a special officer detailed by the captain, writes on the card "steady and industrious," or words equivalent, if the man is all right ; if he is a drunkard, or neglects his family, or sells liquor, or has been convicted of any offence within the past year, the officer so states.

Where the report is satisfactory the man is entered on the register as one qualified to be a teamster or driver, but willing to work as a common laborer. Whether he is certified for work as a driver, or as a common laborer, is determined by the kind of service *for* which the first requisition calls *on* which he is entitled to be certified. If

he is first certified as a common laborer, and does not happen to be selected (double the number called for being certified by the commission), he may be certified on the next requisition as a driver. The commission does not reject any man who applies for work as a common laborer (that is, when the register is open for additions to the list) and who produces the requisite certificates, unless it appears from his own statement, or from the police reports, or from some other responsible source, that he is not physically qualified, or that he sells intoxicating liquor, or is in the habit of using such liquor to excess, or has been convicted of some offence against the laws of the commonwealth during the year last past. If he appears to the registration clerk to be physically incapable he may be required to produce a certificate from a reputable physician.

The cards returned by the police are arranged in alphabetical order for easy reference by name. The entries on the register are in the order of numbers. There is also a book in which the numbers are kept under headings showing the kind of work for which the applicant has applied, or for which he alleges capacity. The headings of a page, given with "D," show how it is done. When, for instance, the health department calls for five teamsters, the clerk takes the numbers that appear under the head of teamsters, marking them as they appear in the extreme left-hand column—with "M" or "N," which indicates military or naval experience, if they have had it,—with "X" if they have had previous experience in city work of the kind called for in the requisition, and with the figure denoting the number of dependents. The whole list can be gone through in a few minutes.

Then, when he has all the numbers of teamsters before him, with the marks which denote the preferences to be

observed, he can readily pick out the ten to be certified. He makes a memorandum of their numbers, and then takes the register and writes out the certification on the form provided. When the men are employed the numbers are checked, and a record made on the register giving date, department, etc.

When an applicant wants to be certified for a special kind of work, such as stone-cutting, or gardening, he is required to produce certificates from his former employers as to his capacity to do such work.

The regulations provide that when the service calls for men possessing superior physical qualifications the officer making the requisition shall so state, and the selection will, so far as practicable, be made from those marked at the time of registration as possessing such qualifications.

As showing the general intelligence of applicants for the labor service, it is found that about four fifths are able to read and write.

Up to November, 1885, about 1,100 laborers had been registered, 800 certified for employment, and 400 employed. Under 100 were rejected on the report of the police as bad, or as having given false addresses. A difficulty arose at the outset from the fact that there were several thousand unemployed laborers in Boston, who would be turned against "civil-service reform" by designing politicians, if most of them were enrolled and only a few hundred got work. Public announcement was therefore made that registration would cease as soon as sufficient were enrolled to supply the probable needs of the departments for the next six months, and tickets for examinations were issued to applicants in the order of their coming.

The results are stated as follows by Commissioner Bugbee: "The heads of departments are greatly relieved;

and the laborers who formerly spent days and weeks hanging about the city yards and the corridors of the City Hall, soliciting the influence of the bosses and the councilmen, have their applications passed upon without delay, and in accordance with fixed rules which they can all understand. Those who are registered are told that it will not improve their chances of getting city work to bring any more certificates or references, or to bring any influences to bear upon the Commissioners or the heads of departments ; that they are not sure of obtaining city work ; and that, if employed, they should not stop trying to get work elsewhere."

A.—CERTIFICATES FROM CITIZENS :

Boston, *Nov. 27, 1885.*

To the Civil Service Commissioners :

I hereby certify that I have known *Peter Brown*, living at *25 Wall St.*, in Boston, for (state how long you have known him) *ten years* ; that he is able-bodied, and of temperate and industrious habits ; and that he is qualified for employment as a *teamster* in the labor service of the City of Boston.

Name, *George Smith.*

Residence, *75 Brighton St.*

Occupation, *Boss Truckman.*

B.—APPLICANT'S STATEMENT :

No. *1213.*

Boston, *Nov. 27, 1885*

I, *Peter Brown*, hereby declare that I am *35* years of age ; that I am now living at *25 Wall St.* ; that I am a citizen of *the U. S.* ; that I have depending upon me for support *wife and 5 children* ; that I was in the *military* service of the United States as a *private* for *three years* in time of war, and that I received an honorable discharge

therefrom ; that I was last employed by *John Barnum* as a *driver*, for *five yrs.*; that I was previously employed as a *teamster* by *George Smith*, and that I am qualified by experience to perform the duties of a *teamster* ; that I am not a vender of intoxicating liquors, or in the habit of using intoxicating liquors to excess ; that I have not been convicted of any offence against the laws of the Commonwealth during the year last past.

(SIGNATURE
OR MARK.) *Peter Brown.*

Sworn to before me, *John Brown*,
Justice of the Peace.

REFERENCES :

NAME.	RESIDENCE.	OCCUPATION.
<i>George Smith.</i>	<i>75 Brighton St.</i>	<i>Truckman.</i>
<i>John Barnum.</i>	<i>50 Myrtle St.</i>	<i>Stable-keeper.</i>

REMARKS :

5 ft. 8 in. Wt. 160. Blk hair. Ruddy comp. Robust.
Would like to be driver in Health Dep., but willing to work
as Com. laborer.

C.—CARD REGISTER, WITH POLICE ENDORSEMENT :

<i>1213.</i>	<i>M</i> <i>6.</i>
<i>Brown, Peter.</i>	
<i>25 Wall St.</i>	
<i>Teamster or C. L.</i>	
<i>Police Div. 10.</i>	
<i>Steady, industrious.</i>	
<i>John Jones. 213.</i>	

BROOKLYN POLICE EXAMINATION.

CIVIL SERVICE OF THE CITY OF BROOKLYN.

EXAMINATION FOR

PATROLMEN, DOORMEN, AND BRIDGE KEEPERS.*

N. B.—Perfect Standing, 100 ; Minimum, 70. The weight given to the subjects on this examination is as follows :

Physique,	40.	Requisite minimum,	70 per cent. or 28		
Testimonials,	30.	"	"	70	" " 21
Intelligence,	20.	"	"	70	" " 14
Experience,	10.	"	"	50	" " 5

PHYSIQUE.

	APPLICANT No. 78.	APPLICANT No. 99.
Age,	26	30
Nativity,	<i>not given</i>	<i>U. S.</i>
Occupation,	<i>Seaman. Fireman</i>	<i>Stone trade</i>
Weight,	168 lbs.	173 lbs.
Height,	6 ft. 1 in.	5 ft. 9 $\frac{3}{4}$ in.

* *Note by Editor.*—The questions are given, as printed on the examination blanks, in the large, plain type, across page. The smaller italic type shows the actual answers to the questions, those on the left by a successful, those on the right by an unsuccessful candidate.

Normal Chest measurement,

39 *in.*

41 *in.*

Chest measurements—

At forced expiration,

37 *in.*

39½ *in.*

At forced inspiration,

41 *in.*

42¾ *in.*

Chest expansion, .

4 *in.*

3½ *in.*

Is there evidence of any hereditary disease ?

No

No

Do you think the applicant a man of temperate habits ?

Apparently

Apparently

What is his statement as to the same ?

Claims to be

Claims to be

Is there any indication of disease of the organs of respiration or their appendages ?

No

No

Is there any indication of disease of the heart or blood-vessels ?

No

No

Is there any indication of disease of the brain or nervous system ?

No

No

Is there any evidence of venereal disease, past or present ?

No

No

Are there any indications of hernia or hemorrhoids ?

No

No

Is the sight good ?

Yes

Yes

Is the hearing good ?

Yes

Yes

Is the applicant apparently a sound man in all respects ?

Yes

Yes

Do you think the applicant is in every way physically qualified for the position ?

Yes

Yes

Rating as to physical examination.

92

The applicant's mark on Physique papers was 37 out of 40.

84 +

The applicant's mark on Physique papers was 34.40 out of 40.

E. A. LEWIS,

Surgeon.

TESTIMONIALS.

The testimonials were in reply to the following form of letter sent out by the Secretary of the Commission :

There is on file in this office an application for appointment in the service of the City of Brooklyn, as POLICEMAN, signed by

who refers to you as having knowledge of his character and of his competence for the place to which he seeks to be appointed.

Will you kindly answer the following questions, and sign and return this sheet to this office by first mail.

☞ A failure to promptly return this sheet, the Commission is compelled to regard as a refusal to certify to the character or competence of the applicant.

☞ In rating the applicants, weight is attached to the FULNESS and PRECISION of the replies, to which special attention should therefore be paid.

How long, when, and where have you known the applicant?

*over Ten Years in Brooklyn
E. D.*

*The applicant (colored) was a
faithful and honest body servant
to me during seven years' service
in the 23d Rgt., N. G. S. N. Y.*

Wheredoes henowreside?

N Oxford St. Bklyn

What is his occupation?

Engineer & Seaman

ex-Capt.

Did he ever learn a trade? If so, what?

Yes Engineer

Is he related to you by blood or marriage?

No

Under what circumstances did you form his acquaintance?

attending School

Has he been in your employment or worked or been employed with or under you? If so, state as precisely as possible when, for how long, where and in what capacity.

Never employed or worked together

Have you otherwise had occasion to know or observe him in his trade, occupation, or profession? If so, state fully the circumstances.

No He has been at Sea

What do you know about his habits with respect to temperance?

I know him to be Strictly temperate

What do you know about his character with respect to honesty and truthfulness?

I know him to be Strictly Honest and Truthful

What do you know about the character of his associates?

His associates are good

Has he ever to your knowledge been placed in any position where his courage was tested? If so, state circumstances and his conduct.

Yes have known him to Save Three lives from Drowning

What causes you to believe it would be wise in the interest of the City to appoint him to the position of POLICEMAN?

I believe him to be a cool headed man such as we require on the Police

Signature,

Please here state your own residence.

Please here state your own occupation.

Note by Editor.—Names, etc., are of course omitted in this reprint.

[One of five similar Testimonials.—ED.]

The applicant's mark on Testimonials was 27 out of 30.

The applicant's mark on Testimonials was 17.66 out of 30.

INTELLIGENCE.

DICTATION.

One of the Examiners will read slowly and so distinctly that each person being examined can hear him; the exercise for dictation accompanying this paper. *Copy compactly and as much of the dictation as possible, and be careful of the spelling.*

It shall be the duty of the Commissionr to conduct all examanations held under these regulations, and to ascertain the fitness of candidates for the service of the citys in respect of caracter knoledge and ability for the branch of the service into wich they seek to enter.

it it shal be the duty of the cormission to conduct all examonation &c held under thies regulations and to asertain the Fitness of Canidate For the Service of the City In respect of carrector knowleag and ability For the Branch of the Servis In to Which they Seek to enter

PENMANSHIP.

Note by Editor.—This was a test of handwriting, following a copy, and, of course, cannot be reproduced here.

ARITHMETIC.

I. Add \$9,201.41
 306.29
 4,287.26
 842.18
 1,620.49

 16,257.63

14257,63

2. Subtract from 8,792,406

$$\begin{array}{r} 901,844 \\ \hline \end{array}$$

$$\begin{array}{r} 7,890,562 \\ \hline \end{array}$$

$$\begin{array}{r} 8906.02 \\ \hline \end{array}$$

3. Multiply 4,906

by 809

$$\begin{array}{r} 44,154 \\ \hline \end{array}$$

$$\begin{array}{r} 39,248 \\ \hline \end{array}$$

$$\begin{array}{r} 3,968,954 \\ \hline \end{array}$$

$$\begin{array}{r} 44190.52 \\ \hline \end{array}$$

4. Divide 48,721 by 46

$$\begin{array}{r} 46 \overline{)48,721} \quad (1059 + \frac{7}{46} \end{array}$$

[No answer made.]

$$\begin{array}{r} 46 \\ \hline \end{array}$$

$$\begin{array}{r} 272 \\ \hline \end{array}$$

$$\begin{array}{r} 230 \\ \hline \end{array}$$

$$\begin{array}{r} 421 \\ \hline \end{array}$$

$$\begin{array}{r} 414 \\ \hline \end{array}$$

$$\begin{array}{r} 7 \\ \hline \end{array}$$

5. Write in words the figures \$90,604.50

Ninty Thousand Six hundred and four Dollars and Fifty cents *nine million six hundred and Four dolars and Fifty cents*

6. Write in figures Four hundred thousand and one.

$$400,000.001$$

$$40000.$$

LOCAL QUESTIONS.

1. How would you proceed from the Bridge entrance to Raymond Street Jail? Give the streets through which you would pass.

I would go down Sands st. Navy, up navy to Flushing ave and then take a short cut through Navy park to raymond st, and up to Jail.

by the of Sands St to gold St to myrtle down myrtle to raymond St Jale.

2. How would you proceed from the South Ferry to the City Hospital? Give the streets.

Up Atlantic ave to Court Court to city hall. fulton to Dekalb ave DeKalb ave to Hospital at raymond st. *I Wold go up atlantic St to henry St and down henry to the horspittal.*

3. Give the streets through which you would pass in going from Hamilton Ferry to Jewell's Wharf.

Saccett & Columbia & Atlantic sts. *Fulton St Court St and Columbia St.*

4. Give your idea of the duties of a Policeman.

To prevent crime if possible and if crime is committed find out the guilty parties and arest them to preserve law and order in our streets and obey the orders of his superior Officers at all times *My eyedear is as I think Wold be to arrest eney person viorlatin the laws*

5. Name a few crimes which render the person committing them liable to arrest and punishment.

Murder Burglary Larceny Drunkardniss — Vile Language High way robbery. indecient exposure. fast driving. Purgery Contemp—Assault &c. *Stealing intoxucaksion, Drunkardness*

6. What course must be pursued under the law toward a person committing a crime before he can be punished?

He must have a fair and impartial trial either by Judge or if neccesary by Jury *First ketch him and then try him*

7. Name some of the penalties which may be imposed upon persons convicted of crime.

For Murder the extreme penalty is death. but may be sent to states prison for all other crimes the punishment is either states Prison Penetenary County Jail or House of reffuge *[No answer made.]*

8. On arresting a disorderly person, what should be done, if he refuses to accompany you to the precinct?

*Get assistance if not an officer call For helpe
call on a citizen*

9. To which position would you prefer to be appointed, Patrolman, Doorman, or Bridge Keeper? Give your reasons in full.

Patrolman

Dooreman

*Because I expect in time by
good behavior &c. To Get pro-
moted to something better.*

10. How should a Patrolman act toward citizens; and toward his superior officers?

*He should act sivel and courteas
to all citizens and obey the comands
of his superior officers*

[No answer made.]

The applicant's mark on Intel-
ligence paper was 17 out of 20.

The applicant's mark on Intel-
ligence paper was 10 out of 20.

EXPERIENCE.

1. What is your trade or occupation?

*I. am : an. able. Seaman. also Stone Trade
a Engineer*

2. Where and with whom are you now at work? How long have you been at work there?

*I. am, not, working. at, presant I am now at Warking For
Daykin and Son In Fulton St
near Hudson. Av*

3. If not now at work, state where and with whom you were last at work, and state why you left that work.

*I was Traviling Engincer at [No answer made.]
Tarrytown for the New croton
Acqueduct and left on purpose to
come here and be examined for
Police force*

4. Have you followed more than one trade or occupa-

tion? If so, state what trade or occupation you have followed other than the one you have already mentioned.

*I, have, drove express waggon
and have been member of Life
Saving Station, also for the
Municipal Electric Light Co
puting up wire & Lamps*

I have done Publict Wating

5. What experience, if any, have you had specially fitting you for Patrolman, Doorman, or Bridge Keeper?

*During my experience as Sea-
man & Life Saving crew I have
been exposed to all sorts of weather
and changes of climates and I
have never worked any place but
in the open air and can stand any
kind of weather*

I have no experience

6. Have you ever been placed in any position where your courage has been tested? If so, give the circumstances fully.

*I. saved, one boy from drown-
ing at old penny bridge Newtown
creek and a man at the foot of
North 4th st—and 1 man & 1
woman in San Francisco, Cal.*

I have not

*N. B. Have, Discharges, from
U. S. Merchant Marine Service
in my pocket if Neccessary*

The applicant's mark on Ex-
perience paper was 9.1 out of 10.

The applicant's rating was as
follows:

Physique	37
Testimonials	27
Intelligence	17
Experience	9.1
Total	90.1

He was second in the test, and
was successful.

The applicant's mark on Ex-
perience paper was 5.66 out of 10.

The applicant's rating was as
follows:

Physique	34.40
Testimonials	17.66
Intelligence	10
Experience	5.66
	67.72

He was below the minimum
of 70, and was not eligible.

U. S. POST OFFICE CARRIER'S EXAMINATION.

[N. Y.] POST OFFICE.—SERIES NO. 11.—CARRIER'S GRADE.*

FIRST SUBJECT [WRITING].

Question 1.—One of the examiners will read so distinctly that each person being examined can hear him, one of the exercises for dictation accompanying these papers. In general not more than fifteen or eighteen words per minute should be read, nor more than five or six words without pause. Give the sense as much as possible, and *be sure that all can hear*. Allow two minutes at the close for punctuation.

(TO APPLICANT.)—Write as much as you can of the passage read. If from any cause you miss a word, do not pause, but go on with the next words you hear. *Write clearly and spell correctly.*

N. B.—*Penmanship, orthography, use of capitals, and punctuation* will be considered on this sheet; also all omissions and mistakes.

APPLICANT NO. 2.

That no recommendation of any person who shall apply for office or place, under the provisions of this act which may be given by any Senator or Member of the

APPLICANT NO. 6.

That no recommendation of any person who shall apply for office or place under the provisions of this act which may be given by any Senator or member of the

* *Note by Editor.*—The questions are given, as printed on the examination blanks, in the large, plain type, across page. The smaller italic type shows the actual answers to the questions, those on the left by a successful, those on the right by an unsuccessful candidate.

house of Representatives except as to the character or residence of the applicant shall be received or considered by any person concerned in making any examination or appointment under this act.

house of representatives except as to the character or residence of the applicant shall be received or considered by any person concerned in making any examination or appointment under this act.

Question 2.—Copy the following precisely :

[Sec. 332, *Postal Laws and Regulations*, 1879.]

Letter carriers are forbidden to solicit contributions of money, gifts, or presents, in person or through others ; to issue addresses, complimentary cards, prints, publications, or any substitute therefor, intended or calculated, to induce the public to make them gifts or presents ; to sell tickets on their routes to theatres, concerts, balls, fairs, picnics excursions, or places of amusement or entertainment of any kind, or to deliver any matter while on their routes, except such as may be intrusted to them in the regular course of business.

Letter carriers are forbidden to solicit contributions of money gifts or presents in person or through others to issue address complimentary cards prints publications or any substitute therefor intended or calculated to induce the public to make them gifts or presents to sell tickets on their routs to theatres concerts balls fairs picnics excursions or places of amusement or entertainment of any kind or to deliver any matter while on their routes except such as may be intrusted to them in the regular course of business.

Question 4.—Write in full, in the spaces opposite, the names of the States denoted by the following abbreviations :

R. I *Rhode Island*

Penn *Pennsylvania*

Va *Virginia*

Fla *Florida*

Ala *Alabama*

Ill *Illinois*

Nev *Nevada*

Colo *Colorado*

Del *Delaware*

Mo *Missouri*

Pennsylvania

Virginia

Florida

Alabama

Illinois

Nevada

Colorado

Delaware

Mexico

Question 3.—Copy the following precisely :

Jan. 18 .	Geo. Washington .	32 Prince st .	Mail Letter .	Removed.
Feb. 16 .	Johnson & Barnes .	29 Clinton pl .	Foreign Letter .	No such number.
March 25 .	Mrs. Mary J. Frost .	197 Mt. Vernon st .	Local Letter .	Deceased.
April 7 .	Miss Mollie Holmes .	397½ St. Cecelia st .	Mail Package .	Not known.
May 23 .	Ripley, Hoygood & Co .	No. 6 Carter's Row .	Local Postal Card	Dissolved.

APPLICANT No. 2.

Jan 18 .	Geo. Washington .	32 Prince St. .	Mail letter .	Removed.
Feb 16 .	Johnson & Barnes .	29 Clinton Pl. .	Foreign Letter .	No such number.
March 25 .	Mrs. Mary J. Frost .	197 Mt. Vernon St. .	Local Letter .	Deceased.
April 7 .	Miss Mollie Holmes .	397½ St. Cecelia St. .	Mail Package .	Not known.
May 23 .	Ripley, Hoygood & Co. .	No 6 Carter's Row .	Local Postal Card .	Dissolved.

APPLICANT No. 6.

Jan 18 .	George Washington .	32 Prince st .	Mail Letter .	Removed
Feb 16 .	Johnson & Barnes .	32 Clinton Pl .	Foreign Letter .	No such number
March 25 .	Mrs. Mary J. Frosts .	197 Mt. Vernon st .	Local Letter .	Deceased
April 7 .	Miss Mollie Holmes .	397½ St Cecelia st .	Mail Package .	Not known
May 23 .	Ripley Hoygood & Co. .	No 6 Carter's Row .	Local Postal Card .	Dissolved

SECOND SUBJECT [ARITHMETIC].

Question 1.—Add the following, placing the total at the bottom :

5,673,911,987 87	5,673,911,987 87
44,376,013,705 90	44,376,013,705 90
7,736,910,286 16	7,736,910,286 16
26,105,321,266 57	26,105,321,266 57
132,873 63	132,873 63
8,856,764,397 49	8,856,764,397 49
1,049,307,000 30	1,049,307,000 30
95,164,347 20	95,164,347 20
<u>Ans. 93,893,525.86.5.12</u>	<u>Ans. 93,893,525.86.12</u>

Question 2.—In one year there were 1,146,107,348 letters, 324,556,440 postal cards, and 852,180,792 newspapers mailed in the United States. How many more cards and newspapers were mailed than letters ?

Give the operation in full.

I. 146. 107. 348. letters	1,146,107,348
324. 556 440	324,556,440
852 180 792	1,470,663,778
I. 176. 737 232	852,180,792
I 146 107. 348	618,482,996 Ans
<u>Ans. 30. 629. 884</u>	

Question 3.—A postmaster sold money orders amounting to \$20,197.75, and out of the proceeds paid money orders amounting to \$15,246.90. How much of the proceeds had he left ?

Give the operation in full.

\$20,197.75	20,197.75
15,246.90	15,246.90
<u>Ans. \$4,950.85</u>	<u>\$4,950.85</u>

Question 4.—Write in words the following number :

101,010,111.

Ans. One hundred and one Million—ten thousand one hundred and eleven. One hundred and one million, tenth of a thousands one hundred and eleven.

Question 5.—Write in figures, ten thousand eight hundred and ten dollars and five cents.

Ans. \$10,810.05 .010. 805. 05

Question 6.—A letter-carrier delivers on a certain trip 9 lbs. of letters, averaging $\frac{1}{2}$ oz. each, 19 lbs. of papers, averaging 2 ozs. each, and 6 lbs. of postal cards, averaging ten to the oz. How many pieces does he deliver in all (a pound being 16 ounces), and what is the total weight ?

Give the operation in full.

9.	16	19. 2)16(8	6 16	9
19	2	8	16	19
6	32	152	160	10
34	9		6	6
	288		960	
	152			44 pieces
	960			16
	1,400 pieces			264
	total weight			44
		34 Pounds		704 lbs.

Question 7.—If a letter-carrier takes 47,520 steps of 24 inches each every day, how many miles will he walk in one year ? (A mile is 5,280 feet.)

Give the operation in full.

$$\begin{array}{r}
 47520 \\
 \underline{24} \\
 190080 \\
 95040 \\
 12) 1.1404.80(95040 \\
 \underline{108 \text{ xxxx}} \\
 60 \qquad 5280)95040(18 \\
 \underline{60} \qquad \underline{5280^x} \\
 048 \qquad 42240 \\
 \qquad \underline{42240} \\
 365 \\
 \underline{18} \\
 2920 \\
 \underline{365}
 \end{array}$$

$$\begin{array}{r}
 47.520 \\
 \underline{24} \\
 190080 \\
 95 \ 040 \\
 5280)1140 \ 480(216 \text{ miles} \\
 \underline{10560 \text{ xx}} \\
 8448 \\
 \underline{5280} \\
 31680 \\
 \underline{31680}
 \end{array}$$

Ans. 6,570 miles

Question 8.—A regular letter-carrier receives the first year a salary of \$600. How much will he earn in 219 days at this rate ?

Give the operation in full.

$$\begin{array}{r}
 365)600(1\frac{235}{365} = \frac{47}{8} \\
 \underline{365} \\
 235 \qquad 219 \\
 \qquad \underline{120} \\
 \qquad 4380 \\
 \underline{219} \\
 26.280
 \end{array}$$

$$\begin{array}{r}
 219)600.00(\$273\frac{2}{3}1\frac{3}{8} \text{ part} \\
 \underline{438 \text{ xx}} \\
 1620 \\
 \underline{1533} \\
 870 \\
 \underline{657} \\
 213
 \end{array}$$

$$\begin{array}{r}
 73)26280(373 \\
 \underline{219^{\text{xx}}} \\
 538 \\
 \underline{511} \\
 270 \\
 \underline{219} \\
 51
 \end{array}$$

Ans. \$373 $\frac{1}{3}$

Question 9.—If one mile of railroad requires 115 tons of rails, costing \$63.50 per ton, what will the rails cost for a road 46 miles long ?

Give the operation in full.

$$\begin{array}{r}
 63.50 \\
 \underline{115} \\
 31750 \\
 6350 \\
 \underline{6350} \\
 7302.50 \\
 \underline{46} \\
 4381500 \\
 \underline{2921000}
 \end{array}$$

Ans. \$335.915.00

$$\begin{array}{r}
 63.50 \\
 \underline{115} \\
 31.750 \\
 6350 \\
 \underline{6350} \\
 46 \overline{)730250} (\$158.31 \frac{24}{46} = \frac{12}{23} \\
 \underline{46xxxx} \\
 270 \\
 \underline{230} \\
 402 \\
 \underline{388} \\
 .145 \\
 \underline{138} \\
 70 \\
 \underline{46} \\
 24
 \end{array}$$

Question 10.—A substitute letter-carrier, while working for a regular carrier, receives the pay of the latter, which is at the rate of \$1.64 per day. If in seven months he earns \$218.12, how many days' work does he average in each month ?

Give the operation in full.

$$\begin{array}{r}
 7 \overline{)218.12} (3116 \\
 \underline{21x} \\
 8 \\
 \underline{7} \\
 11 \\
 \underline{7} \\
 42 \\
 \hline
 \text{ans} \\
 1.64 \overline{)3116} (19 \text{ days} \\
 \underline{164} \\
 1476 \\
 \underline{1476}
 \end{array}$$

$$\begin{array}{r}
 1.64 \\
 \underline{7} \\
 1148 \overline{)212.12} (128 \frac{34}{1148} \text{ days} \\
 \underline{1148x} \\
 19732 \\
 \underline{9184} \\
 548 \\
 \underline{1148}
 \end{array}$$

FIFTH SUBJECT [GEOGRAPHY].

Question 1.—Name the States that border on the Gulf of Mexico.

Florida. Alabama. Mississippi. California.
Louisiana. Texas.

Question 2.—Name five of the largest cities or towns in the State where this examination is held.

New York, Brooklyn. Buffalo. Albany, New York Buffalo.
Rochester. Binghampton. Rochester Troy

Question 3.—Bound the State in which this examination is held, and name and locate its capital.

New York is bounded on the North by Canada. Lake Ontario, and St. Lawrence River. on the East Vermont. Connecticut Massachusetts. on the South New Jersey. and Pennsylvania. on West Pennsylvania. Lake. Erie. Canada and Lake Ontario
On the north by the Dominion of Canada Lake Ontario, East by Vermont, Massachusetts & Connecticut West by Lake Erie Lake Ontario Dominion of Canada

Question 4.—Upon what rivers or other waters are the following cities situated :

Detroit	<i>Lake Michigan</i>	<i>Michigan Detroit River</i>
Chicago	<i>Lake Michigan</i>	<i>Boston</i>
Albany	<i>Hudson River</i>	<i>New York on Hudson</i>
Mobile	<i>Mobile Bay</i>	<i>Tennessee Mobile</i>
Savannah	<i>Atlantic Ocean</i>	<i>Florida Savannah</i>

Question 5.—In what States are the following cities located :

Lowell	<i>Massachusetts</i>	<i>Massachusetts</i>
Syracuse	<i>New York</i>	<i>New York</i>
Bridgeport	<i>Connecticut</i>	<i>Connecticut</i>
Knoxville	<i>Tennessee</i>	<i>Tennessee</i>
Petersburg	<i>Virginia</i>	
Lansing	<i>Michigan</i>	<i>Michigan</i>
Altoona	<i>Pennsylvania</i>	<i>Georgia</i>
San Antonio	<i>Texas</i>	<i>California</i>

Davenport *Iowa*

Fort Wayne *Indiana*

New York

Question 6.—Name the New England States and their capitals.

Maine Augusta

[*No answer given.*]

New Hampshire Concord

*Rhode Island Newport &
Providence*

Connecticut Hartford

Vermont Montpelier

Massachusetts Boston

Question 7.—In what direction is Illinois from Louisiana ?

North.

North West

Question 8.—Into what body of water does the Delaware river empty ?

Chesapeake Bay.

Atlantic Ocean

Question 9.—What river connects Lake Erie and Lake Ontario ?

Niagara River.

St. Lawrence

Question 10.—Where is Long Island, and what body of water lies between it and the main land ?

Long Island lies South of Connecticut, and East of New York.

New York East River

Long Island Sound

The applicant's rating was as follows :

Writing	64.
Arithmetic	93.
Geography	84.50
Average	80.50

He was 14th in the list out of 49, and was successful.

The applicant's rating was as follows :

Writing	54.
Arithmetic	37.
Geography	—
Average	45.50

He fell below the minimum on the first and second subjects, and so was not marked on the third.

NEW YORK SANITARY ENGINEER EX-AMINATION.

MUNICIPAL SERVICE, CITY OF NEW YORK.

ARITHMETIC.

APPLICANT NO. 39.

I. Add 756845
874593
981788
456894
627439
568985
672633
489592

5428769

Add 8989898

9231749
5629376
843
2876565
67876
95
6978428

33774830

2. From 93482005
Take 86927098

6554907

APPLICANT NO. 25.

5,428,769

33,774.830

6554907

Note by Editor.—The questions are given, as printed on the examination blanks, in the large, plain type, across page. The smaller italic type shows the actual answers to the questions, those on the left by a successful, those on the right by an unsuccessful candidate.

From 6300005	
Take 2241396	
<u>4058609</u>	<u>4058609</u>
3. Multiply 698745	
By 7089	
<u>6288705</u>	
5589960	
<u>48912150</u>	
4953403305	4,953,393,705
Multiply 98706	
By 608	
<u>791648</u>	
5922360	
<u>60015248</u>	<u>59,813,248</u>
4. Divide 7296924	
By 906	
<u>8054</u>	<u>805$\frac{231}{463}$</u>
Divide 1176012	
By 12	
<u>98001</u>	<u>98001</u>

The applicant's mark on arithmetic paper was 93.75 out of 100.

The applicant's mark on arithmetic paper was 75 out of 100.

TECHNICAL KNOWLEDGE.

Note by Editor.—The paper on Technical Knowledge, as originally prepared, included other questions which are omitted here, as they were not considered in determining the applicants' ratings.

17. How would you produce an influx of fresh air and an outflow of bad or vitiated air in a dwelling ; in other words, how would you ventilate it ?

By providing an opening to admit the fresh air say below and a counter opening for—say above—for the exit of the vitiated air

[No answer.]

causing a current, drawing in fresh air from the street and causing it to flow through the house and out at the roof.

18. What method should be used in removing waste matter and excreta from dwellings ?

The best way is to have it washed away with water. [No answer.]

21. What should be the size of a drain-pipe for a five-story tenement-house, with two families to each floor ?

At least 6 inches. *I should have the pipes as large as possible but at last—6 inch—*

27. How are drains and sewers flushed ?

By letting water flow freely in- to them. [No answer.]

28. Where there are no public sewers how should house-waste be disposed of ?

It should be collected in small receptacles mingled with earth or other cheap disinfectant and carted away frequently, or it should be buried. *By a Cesspool*

29. How are sewer gases prevented from entering houses ?

By means of a trap in the drain near the front wall of the house. *By means of S. Traps placed at the front and rear of the house in the cellar on the soil pipe leading to the Main sewer.*

30. What is a tenement-house ?

One containing three or more families. *A Building in which Four or more families reside—*

31. In tenement-houses what air space should be allowed to each individual ?

about 900 cubic feet. [No answer.]

32. What air space should be allowed in sleeping-rooms ?

about 600 cubic feet. [No answer.]

33. What material should be used for waste and soil pipes ?

Iron.

Cast iron—

34. May the same material be used for all discharge pipes from a house ?

Yes.

Yes.

35. Where may stoneware pipes be used ?

outside the house under ground if the ground is solid and not newly made *I should not use them except as short connections*

36. Are there any objections to the use of cast-iron pipes ?

Yes, there may be flaws in the casting ; air holes etc.

None if they are well glazed inside.

37. How should the joints of cast-iron pipes be caulked ?

They should be caulked with oakum with a caulking of lead above it.

With oakum & Lead—

38. What is a trap, and how many kinds do you know of ?

A trap is a contrivance which interposes a seal of water to prevent the flow of gas.

A Trap is a fitting to prevent the Sewer gas from returning or back up through the house—The S. Traps. D- Traps. P. Traps —and Green Traps—

There is the S. trap and the half S. there is also a trap made that causes a ball valve to obstruct the flow of gas.

39. To what extent should a "trap" be "water-dipped" ?

At least 2 inches for water closets—on the inner bend—and 1½ for water facets, sinks and basins.

At The cellar—

40. Where should a soil-pipe be "trapped" ?

The Soil pipe of the house is

To prevent the soil from back-

trapped in the drain near the front wall of the house. The soil pipe of a school sink or yard water closet should be trapped shortly after it leaves the receptacle. ing up or returning

41. Under what circumstances may a trap be "syphoned out," and how would you prevent it?

A vacuum forming in the sewer will cause the syphoning of of a trap. I would prevent it by connecting the ventilating pipe with the outer side of the trap the suction from the sewer will feed itself from the vent pipe. By my Vent pipe—

42. How should every sleeping-room in a tenement-house which does not communicate directly with the open air be ventilated?

By windows opening in the halls. Either by a light Shaft or pipe running at least 2 feet above Roof—

43. How should hallways be ventilated?

By a sky light that can be opened. [No answer.]

44. How many water-closets or privies should be provided for every tenement-house, as compared with the number of its occupants?

There should be one for every three families of six. For a floor with 4 Families at lest Two—

45. May cellars, vaults, or underground rooms be occupied as dwellings; if so, under what conditions as to light and ventilation?

They may if the floors are dry and impervious to damp. And if there is a chance for free ventilation and the entrance of daylight, (not recommended.) [No answer.]

46. May animals be kept in a tenement-house ; if so, what ?

I consider all animals objectionable excepting cats.

I understand no Animals except Dogs or Cat are allowed in Tenement house

47. Whose duty is it to cleanse a tenement- or lodging-house, and how often must this work be done ?

The owners ; and it should be done constantly.

The owner—lessee or occupant—at least once a week—The Hallways etc every day

48. In case of infectious or pestilential diseases, what power has the Board of Health with reference to the house where it occurs ?

They have the power to cause the premises to be thoroughly ventilated, cleansed and disinfected and may if thought proper cause its evacuation.

To immediately remove the case and cause the house to be disinfected.

49. What proportion of a city lot may be occupied or covered by a tenement-house ?

About 80 per cent

[No answer.]

50. What shall be the height of ceilings and the area of window space in tenement-houses ?

Ceilings should be 10 feet high and window spaces should be 12 to 18 square feet.

[No answer.]

51. What must be the area of light and air-shafts in tenements of three, four, and five stories high ?

The area should be 20 square feet.

[No answer.]

52. How must water-closets be ventilated ?

By air shafts from the roof, or by windows.

In the case of the old style Vaults by means of a Vent pipe to roof—In case of Hoppers or school sinks by means of Ventilators in the doors—

53. What is the object of fresh-air pipe ; and which side of a trap should fresh-air inlet be taken from ?

To connect the sewage system of the house with the fresh air from outside.

The fresh air inlet should be taken from the side of the trap nearest the house.

To prevent the Syphoning of Trap also to carry off the foul air and leave the Trap sweet—From the crown of the Trap—

54. Should the rain-water leader be “trapped” at the bottom ; if so, why ?

Yes. It prevents sewer gas from entering the windows from possible openings in the leader.

No the rain water leader should not be trapped as in Fine weather it will act as a vent pipe

55. How should lead and iron pipes be connected ?

A brass nassel or end should be pastured to the lead pipe by means of a “wipe” joint and it should be connected with the iron pipe by means of caulking with oakum and lead.

By a Brass Ferrule—Wiped in —

56. State the object of connecting “vent” pipes with traps, on which side the connection should be made, and how it should run through the house.

The object of connecting vent pipes with traps is to assist the escape of gas and prevent the syphoning out of the traps.

[No answer.]

They should be connected on the side nearest the sewer and should run through the house in a straight line from cellar to roof.

58. Draw a section of a five-story tenement showing how waste-pipe should be carried to soil-pipe, and also how the “vent” pipe is applied.

[Diagram necessarily omitted.—Ed.] [No answer.]

59. Write out a report to the Board of Health on the following data :

Five-story tenement, 25 by 65, 4 families on each floor, 120 people, hallway in centre, 10 rooms on floor, about 8 feet square, windows of inside rooms 2 feet square, opening into hall, 4 privies in yard, sink in living-room fitted with $\frac{1}{2}$ -S trap.

Five story tenement, 25 + 65, 4 families on each floor, 120 people, hallway in center, 10 rooms on floor, about 8 feet square, windows of inside rooms 2 feet square opening into hall, 4 privies in yard, sink in living room fitted with $\frac{1}{2}$ S trap.

I should recommend new traps to be at least—

There should be at least 8 privies for the use of the occupants of this House or a school sink introduced in place of those that are there. The sinks should be fitted with $1\frac{1}{2}$ in. S. traps in the House

The applicant's mark on Technical Knowledge paper was 95.42 out of 100.

The applicant's mark on Technical Knowledge paper was 48.23 out of 100.

CITY INFORMATION.

1. Name the three most important United States Government buildings in the city, and give their location.

Post Office = Broadway and Park Row. Sub. Treasury Nassau cor of wall street Custom House Wall street

General Post office B'dw'y & Park place. Sub Treasury Wall St—Custom House Wall St—

2. Name five principal streets running east and west.

Wall st.

14 St. 23 St— 34 St— 42 St—

Fulton st.

125 St

Fourteenth st.

Twenty third st.

One hundred & twenty fifth st.

3. Name five daily newspapers published in the city.

Herald. Times. Tribune Staats *World—Herald—Times—Tri-*
Zeitung and Sun. *bune—Sun*

4. Name three principal public squares below Forty-second street.

City Hall park. Union Square *Madison — Union Square —*
Madison square *Thompkins Square*

5. Name three principal public markets, and give their location.

Washington Market—West st *Washintong Market — Vesey*
& Vesey Fulton Market—South *St—Jefferson Market 8 St—& 6*
St & Fulton Catherine market *ave—Central Market—48 St &*
Catherine st & South *Bdwy*

6. Name five of the departments of the city government.

Police, Health, Public Work, *W. R. Grace—Mayor—Alx—*
Charities & Correction, Dock, *A. Shaler—Pres. Health Dept.—*
 T. S. Brennan—Pres—Charities
 & Correction. Stephen B. French
 —Pres Police Dept—Henry D.
 Purroy. Pres— Fire Dept

7. If you want permission to carry a pistol, to whom do you apply?

Suprintendent of Police *To. Supt Murray—Police Dept*

8. Name three classes of business that pay license fees to the city.

Liquors. Theatres. Public *Hackmen—Licened Vender's,*
Carriers *Theatres*

9. What is the official title of the treasurer of the city of New York?

Chamberlain *City Chamberlain—*

10. Through what means does the city obtain its supply of water, and what department has charge of it?

By means of Aqueduct bring- *From Croton Lake through the*
ing water from Croton river the *adquetucdt—Dept Public Works*
Bronx &c. under direction of *—*
the Dept. of Public works

The applicant's mark on City Information paper was 100 out of 100.

The applicant's mark on City Information paper was 100 out of 100.

EXPERIENCE.

[*Note by Editor.*—The following are copies of the application blanks and appended certificates, which, as filled in by the applicant and his references, are marked as an experience paper.]

[*The applicant*], being duly sworn, says that he is *forty-one* years of age, that he is a citizen of the United States, and that he is a resident of *New York City, N. Y.*, and resides at No. [*applicant's address*] street therein ; that he has *not* been in the service of the city of New York, and that he has been in the *Military* service of the United States for *3 months as private, Harper's Ferry, Va., in summer of 1862, and 30 days as surgeon's steward in summer of 1863, in Penn., and was honorably discharged.*

This deponent further says :

Had a public-school education, been a pharmacist for twenty years, and for the past six years have practised medicine, having graduated from the University Med. College of the City of New York.

[Sworn to and signed by the applicant.]

This application is limited to *Sanitary Engineer.*

[*Three citizens*], residing at No. [*address of each*] street, severally certify, and each for himself certifies, that he has been personally acquainted with the above applicant for *three* years last past,

[*The applicant*], being duly sworn, says that he is *twenty-one* years of age, that he is a citizen of the United States, and that he is a resident of *New York City*, and resides at No. [*applicant's address*] street therein ; that he has *not* been in the service of the city of New York, and that he has *not* been in the service of the United States.

This deponent further says :

I have had experience in engineering, steam heating, and plumbing work, and can handle and run machinery, steam-engines, and know how houses should be constructed in plumbing apparatus, etc.

[Sworn to and signed by the applicant.]

This application is limited to *Sanitary Engineer.*

[*Five citizens*], residing at No. [*address of each*] street, severally certify, and each for himself certifies, that he has been personally acquainted with the above applicant for *four* years last past,

and believes him to be of good moral character, of temperate and industrious habits, and in all respects fit for the service he wishes to enter, and that each is willing that this certificate shall be published for public information, and will, upon request, give such further information concerning the applicant as he may possess.

[Signatures.]

The applicant's mark on Experience-paper was 93.33 out of 100.

The applicant's rating was as follows, his standing on the respective papers being multiplied by the "weight" given to that paper in determining the general result :

Handwriting	90.	x 1	90.
Arithmetic	. 93.75	x 1	93.75
City Information	. . . 100.	x 1	100.
Technical			
Knowledge	95.42	x 5	477.10
Experience	. 93.33	x 2	186.66
			10) 947.51

General average . . 94.75

He stood first in the examination out of forty-four applicants.

and believes him to be of good moral character, of temperate and industrious habits, and in all respects fit for the service he wishes to enter, and that each is willing that this certificate shall be published for public information, and will, upon request, give such further information concerning the applicant as he may possess.

[Signatures.]

The applicant's mark on Experience-paper was 78.66 out of 100.

The applicant's rating was as follows, his standing on the respective papers being multiplied by the "weight" given to that paper in determining the general result :

Handwriting	98.	x 1	98.
Arithmetic	. 75.	x 1	75.
City Information	. . . 100.	x 1	100.
Technical			
Knowledge	48.23	x 5	241.15
Experience	. 78.66	x 2	157.32
			10) 671.47

General average . . 67.14

He fell below the required minimum and was rejected.

PUBLICATIONS :

The courses of reading recommended to its members have been as follows :

LIBRARY OF POLITICAL EDUCATION.

First Series. The 4 vols. in box, \$3.25.

- NORDHOFF (Charles). Politics for Young Americans. 200 pp. 75 cents.
 JOHNSTON (Alex.). History of American Politics. 296 pp. \$1.00.
 PERRY (A. L.). Introduction to Political Economy. 348 pp. \$1.50.
 MCADAM (Graham). An Alphabet in Finance. 232 pp. \$1.00.

Second Series. The 3 vols. in box, \$5.00.

- BLANQUI (J. A.). History of Political Economy in Europe. 628 pp. \$3.00.
 JEVONS (J. S.). Money and the Mechanism of Exchange. 402 pp. \$1.75.
 MILLS (J. S.). On Liberty. 204 pp. \$1.50.

Third Series. The 4 vols. in box, \$3.

- BRASSEY (Thomas). Work and Wages. 290 pp. \$1.00.
 WELLS (David A.). Our Merchant Marine. \$1.00.
 STERNE (Simon). Constitutional History of the United States. 350 pp. \$1.25.
 SPENCER (Herbert). On Education. 75 cents.

Sets of the above series or separate volumes may be had at the prices named, except when, for the time being, any may be out of print. They are uniformly bound expressly for the Society.

The Society issues for its members four tracts in each year upon such subjects as may be selected by the Committee. The following tracts have been already issued, and may be had by applying to the Secretary. The four numbers published in any year will be sent on receipt of 50 cents.

ECONOMIC TRACTS.

1881. 1 ATKINSON (E.). What is a Bank? 10 cents. (Out of print.)
 2 POLITICAL ECONOMY AND POLITICAL SCIENCE. A priced and classified bibliography by Sumner, Wells, Foster, Dugdale, and Putnam. 25 cents.
 3 PRESENT POLITICAL AND ECONOMIC ISSUES, with suggestions of subjects for debate and for essays. 10 cents. (Out of print.)
 4 THE USURY QUESTION, by Calvin, Bentham, Dana, and Wells, with bibliography. 25 cents.
 1882. 5 COURTOIS (Alphonse). Political Economy in One Lesson. Translated by W. C. Ford. 10 cents.
 6 WHITE (Horace). Money and Its Substitutes. 25 cents.
 7 WHITE (A. D.). Paper-Money Inflation in France: a History and its Application. 25 cents.
 8 WHITRIDGE (Frederick W.). The Caucus System. 10 cents.
 1883. 9 CANFIELD (James H.). Taxation. 15 cents.
 10 BOWKER (R. R.). Of Work and Wealth; a Summary of Economics. 25 cents.
 11 GREEN (George Walton). Repudiation. 20 cents.
 12 SHEPARD (E. M.). The Work of a Social Teacher; Memorial of Richard L. Dugdale. 10 cents.
 1884. 13 FORD (W. C.). The Standard Silver Dollar and the Coinage Law of 1878. 20 cents.
 14 SHEPARD (Edwd. M.). The Competitive Test and the Civil Service of States and Cities. 25 cents.
 15 RICHARDSON (H. W.). The Standard Dollar. 25 cents.
 16 GIFFEN (Robert). The Progress of the Working Classes in the last Half Century. 25 cents.
 1885. 17 FOSTER (W. E.). References to the History of Presidential Administrations—1789-1885. 25 cents.
 18 HALL (C. H.). Patriotism and National Defence. 15 cents.
 19 ATKINSON (E.). The Railway, the Farmer, and the Public. 15 cents.
 20 WEEKS (Jos. D.). Labor Differences and their Settlement. 25 cents.
 1886. 21 BOWKER (R. R.). Primer for Political Education. 15 cents.
 22 BOWKER (R. R.). Civil Service Examinations. 15 cents.

If any member cannot procure these publications from the local booksellers, he should address Messrs. G. P. Putnam's Sons, 27 and 29 West 23d Street, New York; Jansen, McClurg, & Co., 119 State Street, Chicago; or W. B. Clarke & Carruth, 340 Washington Street, Boston, Mass., who are the publishing agents of the Society; or any of the Secretaries.

EXECUTIVE COMMITTEE :

R. R. BOWKER, New York, *Chairman*.

E. M. SHEPARD, New York, *Treasurer*.

A. E. WALRADT, New York, *Secretary*.

DAVID A. WELLS, Norwich, Conn.

W. C. FORD, Washington, D. C.

GEO. HAVEN PUTNAM, New York.

WILLIAM M. IVINS, New York.

Office address : 31 Park Row (Room 10) New York.

LIBRARY OF CONGRESS



0 012 080 366 9

EDWIN BURRITT SMITH, *Sec'y for the Northwest*, National Bank Building, Chicago, Ill.

B. R. FORMAN, *Sec'y for the Southwest*, P. O. Box 2415 New Orleans, La.

F. W. DAWSON, *Sec'y for the Southeast*, P. O. Box D 5, Charleston, S. C.

F. W. ZEILE, *Sec'y for the Pacific Slope*, North Point Bonded Warehouse, corner Sansome and Lombard Streets, San Francisco, Cal.

ADVISORY COMMITTEE :

Prof. W. G. SUMNER, Yale College,
New Haven, Conn.

CHARLES FRANCIS ADAMS, Jr., Boston,
Mass.

GEO. S. COE, New York City.

HORACE WHITE, New York City.

A. SYDNEY BIDDLE, Philadelphia, Pa.

HORACE RUBLEE, Milwaukee, Wis.

RICH'D W. KNOTT, Louisville, Ky.

FRANKLIN MACVEAGH, Chicago, Ill.

Gen. BRADLEY T. JOHNSON, Baltimore
Md.

JOHN H. AMES, Lincoln, Neb.

PETER HAMILTON, Mobile, Ala.

E. D. BARBOUR, Boston, Mass.

M. L. SCUDDER, Jr., Chicago, Ill.

Prest. ANDREW D. WHITE, Ithaca, N. Y.

ARCHIBALD MITCHELL, New Orleans, La.

MEMBERSHIP.— Any person who will send fifty cents to one of the Secretaries, becomes an *active member* and is entitled to receive all the tracts issued by the Society during any one year. In order to extend the usefulness of the Society, a *co-operative* membership has been established for such persons as wish to promote political and economic education. The annual fee of a co-operative member is \$5.00, which entitles the member to all tracts of the Society for the current year, and also to name two persons who will have all the privileges of active members.

Letters of inquiry should enclose return postage.

Money should be sent by draft, postal order, or registered letter to the Secretary.